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SHELDON H. PARKER
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**NOTICE OF ALLOWANCE
AND ISSUE FEE DUE**

Note attached communication from the Examiner
 This notice is issued in view of applicant's communication filed _____

SERIES CODE/SERIAL NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
07/723,230	06/28/91	044	TOKAR, M	2613 08/07/92
First Named Applicant MUGLER,		JOHN P.	III	

TITLE OF
INVENTION
THREE-DIMENSIONAL MAGNETIC RESONANCE IMAGING

	ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN. TYPE	SMALL ENTITY	FEES DUE	DATE DUE
2	GC-105	324-309.000	F18	UTILITY	YES	\$565.00	11/09/92

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT.
PROSECUTION ON THE MERITS IS CLOSED.**

**THE ISSUE FEE MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS
APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED.**

HOW TO RESPOND TO THIS NOTICE:

I. Review the SMALL ENTITY Status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the Status is changed, pay twice the amount of the FEE DUE shown above and notify the Patent and Trademark Office of the change in status, or
B. If the Status is the same, pay the FEE DUE shown above.

If the SMALL ENTITY is shown as NO:

A. Pay FEE DUE shown above, or
B. File verified statement of Small Entity Status before, or with, payment of 1/2 the FEE DUE shown above.

II. Part B of this notice should be completed and returned to the Patent and Trademark Office (PTO) with your ISSUE FEE. Even if the ISSUE FEE has already been paid by a charge to deposit account, Part B should be completed and returned. If you are charging the ISSUE FEE to your deposit account, Part C of this notice should also be completed and returned.

III. All communications regarding this application must give series code (or filing date), serial number and batch number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees.

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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
07/723,230	06/28/91	MUGLER	J GC-105
		EXAMINER	TOKAR, M
		ART UNIT	PAPER NUMBER
		2613	3
DATE MAILED: 08/07/92			

NOTICE OF ALLOWABILITY**PART I.**

1. This communication is responsive to _____
2. All the claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice Of Allowance And Issue Fee Due or other appropriate communication will be sent in due course.
3. The allowed claims are Claims 1-44
4. The drawings filed on _____ are acceptable.
5. Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has [] been received. [] not been received. [] been filed in parent application Serial No. _____ filed on _____
6. Note the attached Examiner's Amendment.
7. Note the attached Examiner Interview Summary Record, PTOL-413.
8. Note the attached Examiner's Statement of Reasons for Allowance.
9. Note the attached NOTICE OF REFERENCES CITED, PTO-892.
10. Note the attached INFORMATION DISCLOSURE CITATION, PTO-1449.

PART II.

A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE THREE MONTHS FROM THE "DATE MAILED" indicated on this form. Failure to timely comply will result in the ABANDONMENT of this application. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

1. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.
2. APPLICANT MUST MAKE THE DRAWING CHANGES INDICATED BELOW IN THE MANNER SET FORTH ON THE REVERSE SIDE OF THIS PAPER.
 - a. Drawing informalities are indicated on the NOTICE RE PATENT DRAWINGS, PTO-948, attached hereto or to Paper No. 3. CORRECTION IS REQUIRED.
 - b. The proposed drawing correction filed on _____ has been approved by the examiner. CORRECTION IS REQUIRED.
 - c. Approved drawing corrections are described by the examiner in the attached EXAMINER'S AMENDMENT. CORRECTION IS REQUIRED.
 - d. Formal drawings are now REQUIRED.

Any response to this letter should include in the upper right hand corner, the following information from the NOTICE OF ALLOWANCE AND ISSUE FEE DUE: ISSUE BATCH NUMBER, DATE OF THE NOTICE OF ALLOWANCE, AND SERIAL NUMBER.

Attachments:

- Examiner's Amendment
- Examiner Interview Summary Record, PTOL-413
- Reasons for Allowance
- Notice of References Cited, PTO-892
- Information Disclosure Citation, PTO-1449
- Notice of Informal Application, PTO-152
- Notice re Patent Drawings, PTO-948
- Listing of Bonded Draftsmen
- Other

Michael J. Tokar
MICHAEL J. TOKAR
PRIMARY EXAMINER
ART UNIT 265

REASONS FOR ALLOWANCE

The following is an Examiner's Statement of Reasons for Allowance:

No prior art has been found to meet the limitations of claims 1-44 calling for a method of producing three dimensional image data. The method includes use of a series of RF pulses, gradient field pulses, and time delays to encode a desired contrast property in the form of longitudinal magnetization. Acquiring data in a time period including at least two repetitions of a gradient echo sequence to obtain data from a fraction of a k-space. Provision is made for a recovery period in which T1 (longitudinal relaxation time) and T2 (spin-spin relaxation time) can occur prior to starting a next sequence cycle. These steps are repeated until a predetermined k-space volume is sampled.

Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labelled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Tokar whose telephone number is (703) 305-4932.

06 August 1992

Michael J. Tokar
MICHAEL J. TOKAR
PRIMARY EXAMINER
ART UNIT 265